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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,220	10/06/2005	Kam Fuk Derek Ip	05-828	6510
20306 7590 06/28/2007 MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP 300 S. WACKER DRIVE 32ND FLOOR CHICAGO, IL 60606			EXAMINER AHMED, SHAMIM	
			ART UNIT 1765	PAPER NUMBER
			MAIL DATE 06/28/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/552,220	IP, KAM FUK DEREK	
	Examiner	Art Unit	
	Shamim Ahmed	1765	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 May 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

1. Applicant's arguments filed 5/8/07 have been fully considered but they are not persuasive. Applicant argues that Yamazaki et al fail to teach the laser beam forming uneven portion on the reflective member. Applicant pointed out that the laser beam does not form the uneven portion.

In response to the argument, examiner states that the argument is not persuasive because Yamazaki et al teach that a laser beam through a lens (207) so that a secondary laser beam (306) can reach and irradiates at the bottom of the substrate and as a result the laser beam forming an uneven surface on the reflective surface member (304) as discussed in the paragraph 0059. It is also discusses that the uneven reflective surface can diffuse some portion of the laser beam.

Examiner also states that the laser beam which passes through the lens with the angles, which beam will irradiate the surface (reflective surface) that is behind the semiconductor substrate (303) and forming uneven surfaces on the reflective surface as illustrate in the paragraph 0059.

Therefore, the rejection of the previous office action is repeated herein as follows:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 1765

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wong et al (6,217,175) in view of Yamazaki et al (2004/0224449).

Wong et al teach a process of laser marking on reflective material having spherical shape, wherein the laser beam irradiates on the material at an incident angle and reflected with the same direction as the original incident angle and forming obviously forming the dark and bright spots on the surface because the reflective surface is spherical as the instant invention (col.2, lines 36-53 and figure 2A).

Wong et al fail to explicitly teach that the irradiated surface form rough surface and non-irradiated surface remains reflective.

However, Yamazaki et al teach that a laser beam passes through a lens (207) into a reflective surface member (304) with an incident angle in the range of 45 to 90 degree to diffuse the laser beam for efficiently forming uneven surface on the reflective surface (paragraph 0059).

Therefore, it would have been obvious to one of ordinary skilled in the art at the time of claimed invention to employ Yamazaki et al's teaching into Wong et al's process by diffusing the laser beam with the taught incident angle for efficiently forming uneven surface on the reflective surface as taught by Yamazaki et al.

It is also pointed out that modified laser beam of Wong et al with Yamazaki et al will not exit back at the same direction as the same direction in with the light beam (204) was originally incident.

Art Unit: 1765

As to claim 6, the number of irradiated surface would have been obvious to skilled in the art because that depends on the type of particular device to be treated with the laser beam.

3. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wong et al (6,217,175) in view of Yamazaki et al (2004/0224449) as applied to claims 1-9 above, and further in view of Applicant's admission.

Modified Wong et al discusses above in the paragraph 2 but fail to teach that the reflective material or body comprises polyhedral.

Applicant admits that the reflective bodies conventionally comprises polyhedral (specification page 2, lines 2-5).

Therefore, it would have been obvious to one of ordinary skilled in the art at the time of claimed invention to irradiate reflective bodies comprises polyhedral as is conventional and known as suggested by applicant.

Furthermore, changes in size or shape would have been obvious within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

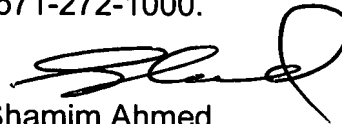
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shamim Ahmed whose telephone number is (571) 272-1457. The examiner can normally be reached on M-Thu (7:00-5:30) Every Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine G. Norton can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1765

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Shamim Ahmed
Primary Examiner
Art Unit 1765

SA
June 5, 2007